D STATES PATENTAND TRADEMARK OFFICE IN TH Application No.: 09/700643 Art Unit: Filed: Mailed 11/16/00 Examiner: Tba

1st Inventor: MATSUMOTO, Hirokazu

Antibody and Use Thereof For:

Atty. Dkt. No. 2523 US0P

Allowed:

Batch:

Paper No.:

Submission of Executed Declaration

Assistant Commissioner for Patents Washington, D.C. 20231 Sir:

> Applicants herewith submit a duly executed Declaration of the inventors for the aboveidentified application.

Also enclosed is an Assignment and Assignment Recordation Cover Sheet.

Should the Examiner believe that a conference with applicants' attorney would advance prosecution of this application, he is respectfully requested to call applicants' attorney at (847) 383-3372.

Respectfully submitted,

Dated: February 2, 2001

Philippe Y. Riesen, Reg. No. 35,657 Mark Chao, Ph.D., Reg. No. 37,293

Attorney for Applicants Customer No. 23115



AUG 2 3 2001

TECH CENTER 1600/2900

PTO/SB/106 (5-00) Approved for use through 10/31/02. OMB 0651-0032

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
rwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Declaration and Power of Attorney for Patent Application

特許出願宣言書及び委任状

Japanese Language Declaration

日本語宣言書			
私は、以下に記名された発明者として、ここに下記の通り宜言する:	As a below named inventor, I hereby declare that:		
・ 私の住所、郵便の宛先そして国籍は、私の氏名の後に記載された過 りである。	My residence, post office address and citizenship are as stated next to my name.		
下記の名称の発明について、特許請求範囲に記載され、且つ特許が 求められている発明主題に関して、私は、最初、最先且つ唯一の発明 者である(唯一の氏名が記載されている場合)か、或いは最初、最先 且つ共同発明者である(複数の氏名が記載されている場合)と信じて いる。	I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled ANTIBODY AND USE THEREOF		
	ANTIGORIAND GOL MERCO		
上記発明の明細書はここに添付されているが、下記の額がチェックされている場合は、この限りでない: □の日に出版され、 この出版の米国出版番号またはPCT国際出版番号は、 であり、且つ の日に補正された出版(該当する場合)	the specification of which is attached hereto unless the following box is checked: X was filed on		
私は、上記の補正客によって補正された、特許請求範囲を含む上記 明細毒を検討し、且つ内容を理解していることをここに表明する。	I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.		
私は、連邦規則法典第37編規則1.56に定義されている、特許 性について重要な情報を開示する着路があることを認める。	I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.58.		

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the need of the individual case. Any comments on the amount of time you are required to complete this form should be sent to Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents and Trademarks, Washington, DC 20231.



AUG 2 3 2001

TECH CENTER 1600/2900

PTO/SB/106 (5-00)

Approved for use through 10/31/02. OMB 0651-0032

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Jananese Language Oppleration

Japanese Language Declaration (日本語宣言書)

出版、或いは米国以外の少なくと 5 属第365条 (a)によるPCT -(d)項又は第365条 (b)項に基・ 優先権を主張する本出顧の出願目	で外国での特許出版または発明者証の とも一国を指定している米国法典第3 国際出版について、同第119条 (a) づいて優先権を主張するとともに、 3よりも前の出版日を有する外国での 或いはPCT国際出版については、 デェックすることにより示した。	I hereby claim foreign priority under Title 35, United States Code. Section 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT International application which designated at least one country other than the United States listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filling date before that of the application for which priority is claimed.	
Prior Foreign Application(s) 外国での先行出質			Priority Not Claimed 優先権主張なし
10-140293	Japan	21/05/1998	· · · · · · · · · · · · · · · · · · ·
(Number)	(Country)	(Day/Month/Year Filed)	
(番号)	(国名)	(出版日/月/年)	
(Number)	(Country)	(Day/Month/Year Filed)	
(番号)	(国名)	(出頭日/月/年)	
私は、ここに、下記のいかなる	米国仮特許出顧についても、その米	I hereby claim the benefit under Til	ile 35, United States Code, Section onal application(s) listed below.
国法典第35編119条 (e)項の	利益を主張する。	119(e) of any United States provisi	
(Application No.)	(Filing Date)	(Application No.)	(Filling Date)
(出願番号)	(出版日)	(出版番号)	(出版日)
典第35編第120条に基づく利なるPC丁国際出頭についても、を主張する。また、本出頭の各符35編第112条第1段に規定をPC丁国際出頭に関示されていな出頭日と本国内出頭日またはPC	る米国出版についても、その米国法 社を主張のは、 大学では、 、	I hereby claim the benefit under Tit 120 of any United States application International application designating and, insofar as the subject matter of application is not disclosed in the publication application in the manner of Title 35, United States Code Sect to disclose information which is mal Title 37, Code of Federal Regulation available between the filling date of national or PCT International filing of	n(s), or 365(c) of any PCT the United States, listed below f each of the claims of this rior United States or PCT her provided by the first paragraph ion 112, I acknowledge the duty erial to patentability as defined in his, Section 1.56 which became the prior application and the
(Application No.)	(Filing Date)	(Status: Patented, Pending, Aba(現況:特許許可、係属中、加	ndoned)
(出取番号)	(出版日)		文策)
(Application No.)	(Filing Date)	(Status: Patented, Pending, Aba	
(出取名号)	(出取日)	(現況:特許許可、係屆中、別	
且つ情報と信ずることに基づく踵	の知識に係わるほ述が真実であり、 述が、真実であると信じられること ほ述などを行った場合は、米国法典	I hereby declare that all statements in knowledge are true and that all state and belief are believed to be true; as	ments made on information

私は、ここに表明された私自身の知識に係わるほどが真実であり、 且つ情報と信ずることに基づくほどが、真実であると信じられること を宜言し、さらに、故意に虚偽のほぼなどを行った場合は、米国法典 第18編第1001条に基づき、罰金または拘禁、若しくはその国方 により処罰され、またそのような故意による虚偽の陳述は、本出顧ま たはそれに対して発行されるいかなる特許も、その有効性に問題が生 ずることを理解した上で既述が行われたことを、ここに宜言する。 I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



AUG 2 3 2001

TECH CENTER 1600/2900

PTO/SB/106 (5-00)
Approved for use through 10/31/02. OMB 0651-0032
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

Japanese Language Declaration (日本語宣言書)

委任状: 私は本出版を審査する手腕を行い、且つ米国特許兩領庁と の全ての業務を遂行するために、記名された発明者として、下記の弁 護士及び/または弁理士を任命する。(氏名及び登録番号を記載する こと)

POWER OF ATTORNEY: As a "named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number).

Philippe Y. RIESEN (Reg. No. 35,657), Mark CHAO (Reg. No. 37,293) 書類送付先 Send Correspondence to: Customer No. 23,115 直通電話連絡先: (氏名及び電話番号) Direct Telephone Calls to: (name and telephone number) Mark CHAO Takeda Pharmaceuticals America, Inc. Phone: (847) 383-3372 Fax: (847) 383-3481 祖一または第一発明者氏名 Full name of sole or first inventor Hirokazu MATSUMOTO 発明者の署名 日付 Inventor's signature 住所 Residence 7-9-1204, Kasuga 1-chome, Tsukuba-shi, IBARAKI 305-0821 JAPAN 国籍 Citizenship Japan 郵便の宛先 Post Office Address Takeda Chemical Industries, Ltd. (IPD) 17-85, Jusohonmachi 2-chome, Yodogawa-ku, OSAKA 532-8686 JAPAN 第二共同発明者がいる場合、その氏名 Full name of second joint inventor, if any Chieko KITADA 第二共同発明者の署名 日付 Second inventor's signature may 29, 200 住所 Residence 2-8, Minamikoyocho 1-cho, Sakai-shi, OSAKA 590-0073 JAPAN 国籍 Citizenship Japan 郵便の宛先 Takeda Chemical Industries, Ltd. (IPD) Post Office Address 17-85, Jusohonmachi 2-chome, Yodogawa-ku, OSAKA 532-8686 JAPAN

(第三以下の共同発明者についても同様に記載し、署名をすること)

(Supply similar information and signature for third and subsequent joint inventors.)



AUG 2 3 2001

Attached Sheet to the Declaration TECH CENTER 1600/2900

第三共同発明者	Full name of third joint inventor, if any
	Shuji HINUMA
発明者の署名 日付	Third inventor's signature date
	Shuji Himuma January 29, 2001
住所 7-9-1402, Kasuga 1-chome, Tsukuba	Residence -shi, IBARAKI 305-0821JAPAN
国籍	Citizenship
	Japan
郵便の宛先	Post Office Address
Takeda Chemical Industries, Ltd. (IPD)), 17-85, Jusohonmachi 2-chome, Yodogawa-ku, OSAKA 532-8686 JAPAN
第四共同発明者	Full name of fourth joint inventor, if any
発明者の署名 日付	Fourth inventor's signature date
住所	. Residence
国籍	Citizenship
郵便の宛先	Post Office Address
第五共同発明者	Full name of fifth joint inventor, if any
発明者の署名 日付	Fifth inventor's signature date
住所	Residence
国籍	Citizenship
郵便の宛先	Post Office Address
第六共同発明者	Full name of sixth joint inventor, if any
発明者の署名 日付	Sixth inventor's signature date
住所	Residence
国籍	Citizenship
郵便の宛先	Post Office Address
	•
第七共同発明者	Full name of seventh joint inventor, if any
発明者の署名 日付	Seventh inventor's signature date
住所	Residence
国籍	Citizenship
郵便の宛先	Post Office Address



AUG 2 3 2001

TECH CENTER 1600/2900

RECORDATION FORM COVER SHEET FORM PTO-1595 (modified) U.S. DEPARTMENT OF COMMERCE (Rev. 6-93) Patent and Trademark Office PATENTS ONLY OMB No. 0651-0011(exp. 4/94) To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. Name of conveying party(ies): Name and address of receiving party(ies): Hirokazu MATSUMOTO, Chieko KITADA and Shuji **HINUMA** Name: TAKEDA CHEMICAL INDUSTRIES, LTD. Additional name(s) of conveying party(ies) attached? No Internal Address: Nature of conveyance: Street Address: 1-1, Doshomachi 4-chome, Chuo-ku Assignment Merger Security Agreement Change of Name City: Osaka, Zip: 541-0045 Country: Japan Execution Date: January 29, 2001 Additional name(s) & address(es) attached? No. Application number(s) or patent number(s): Title: ANTIBODY AND USE THEREOF If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) 09/700.643 Additional numbers attached? No Name and address of party to whom correspondence | 6. Total number of applications and patents involved: 1 concerning document should be mailed: Name: Customer No. 23,115 Total fee (37 C.F.R. §3.41) \$40.00 Enclosed XX Authorized to be charged to deposit account Street Address: Deposit account number: 500799 City: Country Zip: (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE Statement and signature. To the best of my knowledge and belief, the foregoing information is true and sorrect and any attached copy is a true copy of the original document. Mark Chao (Reg. No. 37,293) Name of the Person signing

Total number of pages including cover sheet, attachment, and document: 3

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor hereby sells and assigns, to TAKEDA CHEMICAL INDUSTRIES LTD., a corporation of Japan, 1–1, Doshomachi 4–chome, Chuo–ku, Osaka, Japan (hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to the following invention and U.S. application filed thereon, and the entire right, title and interest in and to any and all Letters Patents which may be granted therefor in the United States, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made.

Title of Invention: ANTIBODY AND USE THEREOF

United States Patent Application:

[]	executed concurrently	herewith	1
[]	executed on		
[X]	Serial No. 09/700,643	Filed	November 16, 2000

Each of the undersigned acknowledges that this sale and assignment includes any and all divisions or continuations of said United States Patent application, and any and all Letters Patent of the United States which may issue on any such applications, including any and all reissues or extensions thereof.

Each of the undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith;

Each of the undersigned warrants and covenants that he has the full and unencumbered right to sell and assign the interests herein sold and assigned and that he has not executed and will not execute any document or instrument in conflict herewith;

Each of the undersigned further covenants and agrees he will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to him relating to said invention or patent application and that he will execute and deliver any papers, make all rightful oaths, assist in and testify in any related proceedings including interferences or lawsuits concerning this application or continuation, division or reissue thereof, and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to obtain a grant of a valid United States Patent on said invention;

Each of the undersigned hereby grants ASSIGNEE and its legal representatives, the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment and specifically, the power to insert in the space provided above, the filing date and application number of the application when known.

In witness hereof, executed by the undersigned on the date(s) opposite the undersigned names.

NAMES AND SIGNATURES OF INVENTORS			
1.Name: Hirokazu MATSUMOTO	Signature: Mitcharu Matsumpla	Date: January 29, 2001	
2.Name: Chieko KITADA	Signature: Mitchagu Matsumpla Signature: Chiefs Witaka	Date: January 29, 200/	
3.Name: Shuji HINUMA	Signature: Shuji Himma	Date: January 29, 2001 Date: January 29, 2001 Date: January 29, 2001	
4.Name:	Signature:	Date:	
5.Name:	Signature:	Date:	
6.Name:	Signature:	Date:	
NAMES AND SIGNATURES OF WITNESSES*			
Name/ Taiji ASAMI Si For: 1 - 3	gnature: Jaji as ami	Date: f ann arg 29,2001	
Name/ Naoki NISHIZAWA Si For: 1 - 3	gnature: Jajn as ami gnature: Raski Nishizawa	Date: January 19, 2001	
	gnature:	Date:	
	gnature:	Date:	
For:			
Name/	gnature:	Date:	
For:			
Name/ Si	gnature:	Date:	

^{*}Notice for Witnesses! Please indicate which inventor(s) you are signing for by writing the corresponding numbers after "For:"